What Is Claimed Is:

1   1. A method for protecting an item of private information in a

2 database, wherein the item of private information is used as a key for retrieving

3 data from the database, wherein the method comprises:

4   receiving the item of private information;

5   creating a hash of the item of private information; and

6   storing the hash of the item of private information in a database.

1   2. The method of claim 1, wherein creating the hash can include

2 creating a SHA-1 or MD5 hash.

1   3. The method of claim 1, wherein the hash of the item of private

2 information is created by the database in a manner that is transparent to an

3 application which manipulates the private information.

1   4. The method of claim 1, wherein processing a query containing the

2 private information involves:

3   receiving the item of private information;

4   creating a hash of the item of private information; and

5   querying the database using the hash of the item of private information.

1   5. The method of claim 1, wherein the item of private information

2 can include one of:

3   a social security number;

4   a driver's license number;

5   a passport number;

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6   an email address;

7   a person's name; and

8   a person's mother's maiden name.

1   6. The method of claim 1, wherein multiple items of private

2 information can be combined prior to creating the hash.

1   7. The method of claim 1, wherein creating the hash further

2 comprises checking a column attribute in the database to see if "privacy" is

3 enabled, and if so creating the hash.

1   8. The method of claim 1, wherein the database is a Lightweight

2 Directory Access Protocol (LDAP) database.

1   9. A computer-readable storage medium storing instructions that

2 when executed by a computer cause the computer to perform a method for

3 protecting an item of private information in a database, wherein the item of

4 private information is used as a key for retrieving data from the database, wherein

5 the method comprises:

6   receiving the item of private information;

7   creating a hash of the item of private information; and

8   storing the hash of the item of private information in a database.

1   10. The computer-readable storage medium of claim 9, wherein

2 creating the hash can include creating a SHA-1 or MD5 hash

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1   11.   The computer-readable storage medium of claim 9, wherein the
2   hash of the item of private information is created by the database in a manner that
3   is transparent to an application which manipulates the private information.

1   12.   The computer-readable storage medium of claim 9, wherein
2   processing a query containing the private information involves:
3   receiving the item of private information;
4   creating a hash of the item of private information; and
5   querying the database using the hash of the item of private information.

1   13.   The computer-readable storage medium of claim 9, wherein the
2   item of private information can include one of:
3   a social security number;
4   a driver's license number;
5   a passport number;
6   an email address;
7   a person's name; and
8   a person's mother's maiden name.

1   14.   The computer-readable storage medium of claim 9, wherein
2   multiple items of private information can be combined prior to creating the hash.

1   15.   The computer-readable storage medium of claim 9, wherein
2   creating the hash further comprises checking a column attribute in the database to
3   see if "privacy" is enabled, and if so creating the hash.

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1   16.   The computer-readable storage medium of claim 9, wherein the

2   database is a Lightweight Directory Access Protocol (LDAP) database.

1   17.   An apparatus for protecting an item of private information in a

2   database, wherein the item of private information is used as a key for retrieving

3   data from the database, comprising:

4   a receiving mechanism configured to receive the item of private

5   information;

6   a hashing mechanism configured to create a hash of the item of private

7   information; and

8   a storage mechanism configured to store the hash of the item of private

9   information in a database.

1   18.   The apparatus of claim 17, wherein the hashing mechanism is

2   configured to use SHA-1 or MD5 hashing functions.

1   19.   The apparatus of claim 17, wherein the hashing mechanism is

2   internal to the database and is transparent to an application which manipulates the

3   private information.

1   20.   The apparatus of claim 17, further comprising a query mechanism

2   configured to perform queries containing the private information, wherein the

3   query mechanism is configured to:

4   receive the item of private information;

5   create a hash of the item of private information; and to

6   query the database using the hash of the item of private information.

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1   21.   The apparatus of claim 17, wherein the item of private information

2 can include one of:

3   a social security number;

4   a driver's license number;

5   a passport number;

6   an email address;

7   a person's name; and

8   a person's mother's maiden name.

1   22.   The apparatus of claim 17, wherein the hashing mechanism can be

2 further configured to combine multiple items of private information prior to

3 creating the hash.

1   23.   The apparatus of claim 17, wherein the hashing mechanism is

2 further configured to check a column attribute in the database to see if "privacy" is

3 enabled, and if so, to create the hash of the private information.

1   24.   The apparatus of claim 17, wherein the database is a Lightweight

2 Directory Access Protocol (LDAP) database.